REMARKS

Upon entry of the present Amendment, the claims in the application are claims 1-3 and 5-21, of which claims 1 and 20 are independent.

The above-identified Office Action has been reviewed, the references carefully considered, and the Examiner's comments carefully weighed. In view thereof, the present Amendment is submitted. It is contended that by the present amendment, all bases of rejection set forth in the Office Action have been traversed and overcome. Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

Examiner Interview

Although the Examiner and her supervisor declined applicant's request for a telephonic interview, applicant thanks the Examiner for considering and briefly responding to a proposed draft Amendment which applicant's undersigned representative submitted on 10 June 2008.

Amendments Presented

Independent claims 1 and 20 are amended to further define aspects of the invention, i.e., defining that the vehicle is a motorcycle, and defining that the material of the IC tag having transmissivity to electromagnetic waves is resin, and the IC tag is disposed near a steering handle or behind a seat of the motorcycle. The dependent claims are amended to be consistent with the amended independent claims, and claim 4 is cancelled.

Applicant respectfully submits that the amendments are fully supported by the original disclosure, including the drawings and claims. See, for example, Figs. 2, 7, 8, 18, 19 and the discussion at paragraphs [058], [076] – [083], and paragraphs [126] – [132]. Applicant also respectfully submits that no new matter is introduced by the above amendments.

Response To Rejections Presented in Office Action

After careful consideration of the rejections set forth in the Office Action, the applicant respectfully submits that as amended herein, all pending claims patentably distinguish over the art of record, and requests allowance of all pending claims, as discussed further below.

Claim Rejection – 35 USC 102

In the Office Action (page 2, item 2), the Examiner rejected claims 20-21 under 35 USC §102(b) as being anticipated by Rai (US 6,222,463). The Examiner has taken the position that in her view, Rai's vehicle communication network includes all of the features/aspects of the claimed invention, although the Examiner does not specifically associate components of Rai's system (by their reference numbers) with the features of claims 20, 21.

Applicant's Response

Upon careful consideration and in light of the above amendments to claim 20, applicant respectfully submits that the rejection is overcome and that claims 20-21 patentably distinguish over Rai's vehicle communication network, based on the following.

Initially, applicant respectfully submits that Rai's communication network is distinct from the claimed invention because such network is not suited to use with motorcycles and does not include an IC tag provided with each motorcycle which is integrated with an element formed of a resin material having transmissivity to electromagnetic waves, as now claimed.

As discussed in the Background of the present specification, there are specific problems associated with use of IC tags on motorcycles because of the open / exposed nature of motorcycles, e.g., the tags must be able to withstand use under severe conditions. Moreover, given the required functionality of the IC tags, whereby they frequently have information read therefrom and written thereto, there are problems associated with the proper functioning of the tags when they are shielded behind / within metal parts and other parts which reflect

electromagnetic waves, e.g., reading and writing failures. These problems are desirably overcome by the management system of claim 20. Although the management system is specifically for motorcycles, the IC tags provided on the motorcycles are integrated with an element formed of a resin material having transmissivity to electromagnetic waves.

Contrary to the claimed invention, the management system of Rai is structured / intended for use with conventional automobiles where the IC tag may be disposed in a secure space such as in the trunk, rather than for use with motorcycles where the tags would be exposed to harsh environmental conditions. Further, given that Rai disposes his tags in the trunk of an automobile, it is clear that his IC tags are not integrated with an element formed of a resin material having transmissivity to electromagnetic waves, such as now required by claim 20, nor are Rai's tags disposed at a portion of the motorcycle that is not covered by an obstacle when viewed in plan view as defined in new claim 22.

Additionally, applicant respectfully submits that Rai's communication network is distinct from the claimed invention because such network does not include an IC tag provided with each motorcycle which is disposed near a steering handle or behind a seat of the motorcycle. Because motorcycles are often placed side by side during transportation or storage, the location of an IC tag near the steering handle or behind the seat of a motorcycle makes it easy and convenient to access to the IC tag from a position in front of the motorcycle or behind the motorcycle (see the description at paragraphs [077] – [083], especially paragraph [082]).

Although Rai discloses a vehicle communication network using an electronic tag, Rai does not teach or suggest a management system of an IC tag equipped *motorcycle*, and specific advantageous positions of the IC tag *provided on the motorcycle* as claimed.

In this regard, while Rai generally discloses that his "electronic tag 115 may reside in the license plate, but may also reside in the trunk or dashboard of the vehicle", he does not

indicate/disclose any specific structure of the tag which would permit it to withstand use in a severe environment (such as on a motorcycle used outdoors), nor does he indicate that that the tag is integrated with an element formed of a resin material having transmissivity to electromagnetic waves. Rai doe not address or appreciate the particular problems which are addressed and overcome by the presently claimed invention.

Generally, applicant notes that Rai's portable interrogator 150, through which communication with the electronic tag of a given vehicle is initiated and controlled, is distinct from the portable terminal 221 according to an embodiment of the present invention, which essentially performs the same functions as the (fixed) terminals 220 but is portable so that it can access vehicles at remote locations.

As disclosed by Rai, e.g., at col. 4, lines 1-10, col. 5, lines 18-28, and col. 7, lines 44-53 information stored in any given tag is not directly accessible by any of a plurality of base stations 155 that are in high speed communication with a control center 180 having an updatable database 200 (and may correspond to the terminals 220 of the present invention), but instead the information stored in any given tag is accessed by a portable interrogator 150 which is brought into close proximity to a vehicle (e.g., by a law enforcement officer), and once information is retrieved from the tag the portable interrogator 150 may then communicate this to the control center through a plurality of base stations 150 which are spaced throughout several defined radio coverage cells (areas) 105 of an overall communication system 100.

Moreover, while the electronic tags 115 store ID information therein, e.g., see Fig. 7, the tags do not have an additional/specific "ID code in standardized data form registered therein" such as in the present invention (claim 22), but instead the portable interrogator 150 sends out signals with very limited range such that specific electronic tags located within stationary or moving vehicles may be selectively communicated with, without experiencing interference from

other tags located nearby. Further, it is the interrogator 150, not the base stations 155, which updates the information that is then sent to the tag for recording therein (see col. 7, line 16 – col. 10, line 63).

Based on the foregoing the rejection of claims 20, 21 as anticipated by Rai is believed to be overcome, and it is respectfully requested that the rejection be reconsidered and withdrawn.

Claim Rejections – 35 USC § 103

1. In the Office Action (page 3, item 4) the Examiner rejected claims 1-6, 9, 11-12, 14-15 and 19 under 35 USC §103(a) as being unpatentable over Rai in view of Senba (US 7,088,249).

The Examiner has taken the position that, in her view, Rai discloses substantially all of the features of the claimed invention except for the tag molding material; Senba teach an IC tag molded in a resin material to protect the tag; the material does not interfere with the transmissivity of electromagnetic waves emitted from the tag (col. 16, lines 18-44); it is obvious that the tag of Rai could be molded in a protecting material and the material would obviously be selected to let penetrate electromagnetic waves communication signal; Rai discloses disposition of the IC tag in a license plate or a dashboard which his not covered by an obstacle; and disposition of the IC tag on a meter case or panel, or in a rear fender is an obvious design choice.

Applicant's Response

Upon careful consideration and in light of the above amendments to claim 1, applicant respectfully submits that the rejection is overcome and that claims 1-3, 5, 6, 9, 11-12, 14-15 and 19 patentably distinguish over the Rai and Senba references, because neither reference teaches or suggests features required by each of the present claims, including those discussed above in relation to amended claim 20 which also apply to amended claim 1 and the following.

For example, while Rai discloses storage of information related to a vehicle's identification, he does not disclose storage of "an ID code registered therein in standardized data format" as required by claim 1. Again, Rai's management system is based on the location of the portable interrogator 150 being in close proximity to a given vehicle / electronic tag, rather than automated collection of information from a plurality of vehicles based on the ID codes stored in the tags associated with respective vehicles such as in the present invention.

As another example, while Rai discloses siting an electronic tag in a vehicle dashboard or license plate, he does not disclose specific disposition of the tag within a meter case, on a back surface of a meter panel or in a vehicle bumper. This distinction is important because the claimed disposition not only protects the IC tag from contact with foreign objects (unlike a tag disposed in a license plate), but also protects the tags (as molded within a resin) from UV radiation which could deteriorate the resin over time (which is something never mentioned or addressed by Rai).

In this regard, applicant notes that Rai's general reference to the tags being in a dashboard, license plate or in a trunk does not provide any indication of the actual structure of the tag in relation to each of these other components, e.g., if the tag is provided in the license plate, is it enclose within layers of the plate, is it on a backside of the plate, etc. Again, a metal cover / object provided over the tag is likely to cause interference with electromagnetic waves being communicated with the tag, as discussed above.

Further, applicant respectfully submits that it is not an obvious matter of design choice to go from general disposition of a tag in a license plate, dashboard or trunk to the specifically claimed disposition of the tag in a meter case, a rear surface of a dashboard or in a bumper, because these components are not equivalent. Again, in a license plate the tag is exposed to direct contact with foreign objects, in the trunk the tag is shielded/enclosed by metal parts, in the dashboard the tag may still be exposed to contact with foreign objects or to being shielded by metal parts, etc.

Also, the disposition of Rai's communication network is distinct from the claimed invention (again) because such network does not include an IC tag provided with each motorcycle which is disposed near a steering handle or behind a seat of the motorcycle, whereas such disposition is particularly advantageous because makes it easy and convenient to access to the IC tag on a number of closely disposed motorcycles from a position in front of the motorcycle or behind the motorcycle (see the description at paragraphs [077] – [083], especially paragraph [082]).

Regarding Senba et al., this reference discloses a housing/installation structure for a RFID tag that protects the tag from external stress or impact during various situations, and specifically involves use of a metal cover to protect the tag if it is contacted by foreign objects.

Senba provides a housing/installation structure for a RFID tag installed on a conductive (metal) member with the surface being covered with a protective member made of steel, but Senba states that communication with the tag is still possible because the installation structure provides a leakage path where the residual magnetic flux can leak therethrough to the outside. Senba advocates that this is a novel finding that allows the RFID tag to be adequately shielded / protected from external stress while still allowing sufficient communication capabilities. As noted by the Examiner, Senba also provides that the RFID tag may include an IC chip and that the housing structure may involve molding the several components of the tag in a resin package 31, in addition to the protective metal member, with the resin package acting as a shock absorber and/or insulator for the tag.

Applicant respectfully submits that Senba's structure is distinct from the disclosed IC tag because it expressly and necessarily involves use of a metal covering part which (itself) does not have transmissivity to electromagnetic waves. In this regard, applicant notes Senba's discussion of the prior art at col. 1, lines 53-60, involving use of a plastic container for RFID tags, but Senba discusses that such plastic cases *have endurance problems – and hence he teaches away from the*

presently claimed invention, which is an indication of the non-obviousness of the claimed invention. Further, Senba also fails to teach or suggest a management system of an IC tag (RFID tag) equipped motorcycle, and specific positions of the IC tag (RFID tag) provided on the motorcycle near a steering handle or behind a seat of the motorcycle as now defined in the independent claims.

Teaching Away

The Court of Appeals for the Federal Circuit has established that a prima facie case of obviousness can be rebutted if the applicant . . . can show 'that the art in any material respect taught away' from the claimed invention." ***In re Geisler***, 116 F.3d 1465, 1469, 43 USPQ2d 1362, 1365 (CAFC 1997). "A reference may be said to teach away when a person of ordinary skill, upon reading the reference, . . . would be led in a direction divergent from the path that was taken by the applicant." ***Tec Air, Inc. v. Denso Mfg. Mich. Inc.***, 192 F.3d 1353, 1360, 52 USPQ2d 1294, 1298 (CAFC 1999),

In re Haruna, 249 F.3d 1327; 58 U.S.P.Q.2D 1517 (CAFC 2001).

In the present application, by teaching away from applicant's claimed structure, Senba's clear preference for non-plastic containers provides evidence of non-obviousness of applicant's claimed invention.

Based on the foregoing, applicant respectfully submits that the rejection of claims 1-4, 5, 6, 9, 11-12, 14-15 under 35 USC §103(a) based on the Rai and Senba references is overcome, and it is respectfully requested that the rejection be reconsidered and withdrawn.

2. In the Office Action (page 3, item 5) the Examiner rejects claims 7-8, 10 and 13 under 35 USC §103(a) as being unpatentable over Rai in view of Teraura (US 6,873,259).

The Examiner takes the position that Rai does not disclose the tag including recycling and waste management manifest information. However, the Examiner states that Teraura

teaches attaching ID tag to various electronic articles to track their life cycle from manufacturing to recycling and disposal (Figs. 16-17, col. 1, line 38-col. 11, line 21). Thus, according to the Examiner, it would have been obvious to modify the electronic tag of Rai to include records of recycling and waste management to track the life cycle of the vehicle as design choice. Regarding claim 10, the Examiner states that Teraura teaches the tag includes a replacement record of consumer parts (col. 1, line 9) and regarding claim 13, the Examiner alleges that Teraura teaches the tag includes a record of payment (col. 11, lines 1-6) and thus, according to the Examiner it would have been obvious the tag of Rai could include a record payment including tax payment as design choice.

Applicant's Response

Upon careful consideration and in light of the above amendments to claim 1, applicant respectfully submits that the rejection is overcome and that claims 17, 8, 10, 13 patentably distinguish over the Rai and Teraura references, because neither reference teaches or suggests features required by each of the present claims, including those discussed above in relation to amended claim 1 and the following.

Initially applicant notes that the rejected dependent claims include all of the features of claim 1, and the Examiner applied the Senba reference in rejecting claim 1, but (inconsistently) not in the rejection of claims 7, 8, 10 and 13.

Further, applicant respectfully submits that the proposed hypothetical combination of Rai with select features of Teraura is improper because it is based on a suggestion coming entirely from the Examiner (guided by use of impermissible hindsight from applicant's own disclosure), and cannot be fairly gleaned from any rational/reasonable motivation of the references when considered singly or in combination thereof.

Specifically with regard to Teraura, he discusses a computer as the type of product which

may be recycled or reused, see col. 3, lines 48-51. A computer is not analogous to a motorcycle in terms of replacement of "consumable parts" of a motorcycle, recycling information, a manifest system, a tax payment record, consumable parts of the motorcycle, etc. such as defined in claims 7, 8, 10, 13. For example, consumable parts include motor oil (considered a toxic substance), tires, brakes, etc. as discussed in the specification, which are in no way comparable to parts of a computer. Moreover, given the relatively small size, cost and usable life of a computer in comparison to a motorcycle, concepts of recycling parts of a computer, replacing consumables, including a manifest system, tax records, etc. are simply not comparable to such concepts when applied to a motorcycle as claimed.

Correspondingly, persons skilled in the art would not have (in the first place) looked to Teraura even if such persons were considering the possibility of modifying Rai's *vehicle* communication network, and such persons would not consider the proposed modification of Rai's vehicle communication network relative to a select feature of Teraura's computer tracking system to be obvious.

Based on the foregoing, applicant respectfully submits that the rejection of claims 7, 8, 10, 13 under 35 USC §103(a) based on the Rai and Teraura references is overcome, and it is respectfully requested that the rejection be reconsidered and withdrawn.

3. In the Office Action (page 4, item 6), the Examiner rejected claims 16-18 under 35 USC §103(a) as being unpatentable over Rai in view of Nakayama (US 6,791,456) or Campbell (US 6,546,088).

The Examiner takes the position that in claims 16-18, Rai does not disclose the electronic tag is mounted on a vehicle that includes a saddle-ride seat, although Nakayama and Campbell are evidence that an electronic identification mounted on a vehicle having a saddle ride seat is well known (Nakayama, tag 3 on vehicle 1, fig. 1, Campbell, ID tags for bicycles, col. 2, lines

49-59). Further, the Examiner states that although particular position of the tag on the vehicle is not specified, it would have been obvious the tag can be affixed to any convenient place at will for its very small size.

Applicant's Response

Upon careful consideration and in light of the above amendments to claim 1, applicant respectfully submits that the rejection is overcome and that claims 16-18 patentably distinguish over the Rai, Nakayama and Campbell references, because none of reference teaches or suggests features required by each of the present claims, including those discussed above in relation to amended claim 1 and the following.

Again, applicant notes that the rejected dependent claims include all of the features of claim 1, whereas the Examiner applied the Senba reference in rejecting claim 1, but has (inconsistently) not included Senba in the rejection of claims 16-18.

Further, applicant respectfully submits that the proposed hypothetical combination of Rai with select features of Nakayama and Campbell is improper because it is based on a suggestion coming entirely from the Examiner (guided by use of impermissible hindsight from applicant's own disclosure), and cannot be fairly gleaned from any rational/reasonable motivation of the references when considered singly or in combination thereof.

Relative to the proposed modification of Rai's system, Nakayama discloses a vehicular reporting system including a terminal apparatus having a radio communication function included on a vehicle (motorcycle or automobile), the terminal apparatus performs radio communication with a radio base station housed in a plurality of radio base stations through a communication service carrier. The terminal apparatus can transmit abnormality report to a control apparatus via the base station apparatus and a network. The security center communicates to an operation center for dispatching necessary personnel, such as police for handling theft, accidents, and

failure, a road service center, a maintenance service center of a vehicle producer, or a wrecker center, to a vehicle suffering from an abnormality. This has little or nothing to do with the electronic tag-based system of Rai, and correspondingly persons skilled in the art would not consider the proposed modification to be obvious.

Further, Nakayama fails to expressly disclose where the terminal is disclosed on the vehicle, and importantly, Nakayama fails to expressly disclose whether the terminal is disclosed in a resin mold that allows efficient communication between the terminal and the control center. Thus, Nakayama also fails to disclose other important features of the claimed invention. In this regard, applicant respectfully traverses the Examiner's statement regarding placement of the tag at any convenient location because, in fact, the electronic tag of Rai (or the present invention) is not especially small. As discussed in the background of the present specification, the size and output of such tags cannot be lowered significantly without detrimentally affecting the ability to reliably read and write information to same.

Regarding Campbell, applicant notes that a tag for use on a non-motorized bicycle, as disclosed by Campbell, is quite different than the electronic tags of Rai (or any RFID tag for that matter) because it does not involve sending/receiving communications via electromagnetic waves, and correspondingly is not concerned with the particular problems of electronic tags addressed by Rai, etc. Correspondingly persons skilled in the art would not considerate obvious to modify Rai's system by placing his electronic tag on a bicycle because there is no apparent reason to do so.

Based on the foregoing, applicant respectfully submits that the rejection of claims 16-18 under 35 USC §103(a) is overcome, and it is respectfully requested that the rejection be reconsidered and withdrawn.

Conclusion

In conclusion, the applicant has overcome the Examiner's rejection of claims 1-3 and 5-21. Moreover, applicant has considered all of the references of record, and it is respectfully submitted that the invention as defined by each of the present claims is clearly patentably distinct thereover.

The application is now believed to be in condition for allowance, and a notice to this effect is earnestly solicited.

If the Examiner is not fully convinced of the patentability of all of the claims now in the application, applicant respectfully requests that the Examiner telephonically contact applicant's undersigned representative to expeditiously resolve prosecution of the application.

Favorable reconsideration is respectfully requested.

Respectfully submitted,

/_____/

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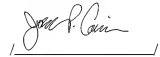

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